

CENTRAL INTELLIGENCE AGENCY

REPORT

CD NO.

COUNTRY East Germany

DATE DISTR. 19 November 1954

SUBJECT Academy Institute for Research on the
Physics of Solids, Berlin-Buch

NO. OF PAGES 4

PLACE
ACQUIRED

NO. OF ENCLS.
(LISTED BELOW)

25X1

DATE OF INFO.

SUPPLEMENT TO 25X1
REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U. S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION 25X1

koerperforschung) is located at Lindenberger Weg 70-73 in Berlin-Buch in the fifth floor of a building which also houses the Academy Institute for Medicine and Biology. In late August 1954 there was a shortage of space for the work of the Institut fuer Festkoerperforschung; long-standing plans to transfer it to a building near the Ber-

ILLEGIB

ILLEGIB

2. The Institute is headed by Professor Friedrich Moeglich, who at the same time holds the Chair for Theoretical Physics at the Berlin Humboldt University. Moeglich is a [REDACTED] Communist sympathizer; it is not known, however, whether he is a [REDACTED] member of the SED. His deputy in the Institute is Dr. Hellmut Simon.

3. The Institute is divided into the following Departments:

- a. Department for Structural Research (Strukturforschung) -
Dr. Hellmut Simon. The following are Simon's scientific

- (1) Dipl. Phys. Gerhard Eichhoff
- (2) Dipl. Phys. Hans Thiel
- (3) Dipl. Phys. Eduard Schnuerer
- (4) Diplomant Kessler (fnu)
- (5) Diplomant Walter Schweinberger

colleagues:

In addition, the following permanent personnel belong to this department: precision mechanic, Maassen (fnu); laboratory worker, Miss Kippoldt (fnu); laboratory worker, Schepstadt (fnu); laboratory worker, Mrs. Ewerenz (fnu). As of late August 1954, the scientific staff had in the recent past been engaged as follows:

- (a) Simon: X-ray dosimetry with cadmium sulfide cells as indicators and the study of the qualities of CdS crystals under X-ray radiation.
- (b) Eichhoff was building a spectrograph for ultra-soft X-rays; it was almost completed.

--25X1

CLASSIFICATION **SECRET**

STATE		#x NAVY	#x NSRB	DISTRIBUTION					
ARMY	#x AIR		#x FBI			1			

SECRET CONTROL/U.S. OFFICIALS ONLY

-2-

- (c) Thiel had been engaged in the measuring of X-ray fields with CdS dosimeters. At that time, he was building an installation for the study of infrared elimination (Infrarottilgung) with CdS crystals subjected to X-ray radiation.
- (d) Schnuerer: X-ray absorption measurements with CdS crystals. He was also engaged in the construction of an X-ray monochromator.
- (e) Kessler had built a small Van de Graff installation of a few hundred kV.
- (f) Schweinberger was engaged in structural research on CdS crystals.

b. The Electronic Department, headed by Dr. Friedrich Eckart. He is assisted by the following scientific personnel:

- (1) Dipl. Phys. Gerhard Schubert
- (2) Dipl. Phys. Heinz Dietrich
- (3) Dipl. Phys. Gerhard Mueller

In addition, the department has the following technical personnel: laboratory worker, Miss von Halden (fnu); circuit mechanic, Albrecht (fnu); precision mechanic, Buettner (fnu). As of late August 1954, the scientific staff of the Department had, in the recent past, been engaged as follows:

- (a) Eckart: Measurement of the conductivity of purest selenium and measurement of its Hall effect. In addition to his work in the Institute, Eckart also works with the Radio and Television Center in Berlin-Adlershof.
- (b) Schubert: Study of CdS subjected to bombardment with electrons of slow and medium speed.
- (c) Dietrich: Preparation of purest selenium. Construction of an installation for growing monocrystals. Research on germanium and silicon diodes and transistors. Dietrich has cooperated with VEB Werk fuer Nachrichtenelemente "Carl von Ossietzky" (Dralowid) in Teltow for the development of transistors.
- (d) Mueller: Study of phosphorus subjected to impulse radiation with electrons.

c. Electro-Optical Department, headed by Dr. Wilhelm Muscheid until 30 June 1954, now temporarily headed by Dr. Wilhelm Buttler. The following are its scientific personnel:

- (1) Miss Dr. Ingrid Poppe
- (2) Dipl. Phys. Brauer (fnu)
- (3) Dipl. Chem. Udo Holland-Nell

In addition, the Department has the following technical personnel: laboratory worker and mechanic, Bernau (fnu); laboratory worker, Ludeck (fnu); laboratory worker, Richard Peschke; laboratory worker, Mrs. Zocher (fnu); laboratory worker, Mrs. Pallich (fnu); laboratory worker, Pfeiffer (fnu). The Photographic Laboratory of the Institute, headed by Mrs. Rieske (fnu), who is assisted by Mrs. Gauger (fnu), is attached to this department. The scientific staff of the department had been engaged as follows:

-2-

SECRET CONTROL/U.S. OFFICIALS ONLY

SECRET CONTROL

U.S. OFFICIALS ONLY

SECRET CONTROL/U.S. OFFICIALS ONLY

-3-

- (a) Muscheid and Buttler: Contact studies of CdS cells; measurement of the Hall effect, conductivity and noise of CdS cells.
- (b) Poppe: Measurement of the potential of CdS cells and measurement of the fluorescence of CdS crystals. Also the study of layers to be steamed upon CdS crystals.
- (c) Brauer: Study of the rise and decay of the photo-current in CdS cells. Also the measurement of the rise and decay of luminescence in CdS cells.
- (d) Holland-Nell: Production of CdS crystals with defined impurities. In the future he was also to try to produce monocrystals. In addition, he had been assigned the study of III-V compounds.

d. Chemical Department, headed by Professor Otto Neunhoeffer until January 1954. The department, as of late August 1954, did not have a head. It was planned to call Dr. Pretz (fnu), an industrial chemist, as its head. The personnel of the department are:

- (1) Dr. Schlueter (fnu)
- (2) Dr. Ebert (fnu)

In addition, there are the following: laboratory worker, Mueller (fnu); laboratory worker, Matzkeit (fnu); laboratory worker, Sauvageout (fnu). The personnel of the department were engaged as follows:

- (a) Schlueter: Pycnometric measurements with silver bromide monocrystals for the purpose of comparing pycnometric density with X-ray density.
- (b) Ebert: Production of CdS crystals ~~the production of CdS powder~~, at high temperatures around 1,600 Centigrade. ~~to the preparation of purest germanium through thermal decomposition of GeH₄.~~

4. The following equipment is available in the departments of the Institute:

- a. Department for Structural Research: The spectrograph for ultrasoft X-rays, built by Eichhoff; a double monochromator; an X-ray structure installation from the Seifert firm in Hamburg; several oscillographs, multiflex galvanometers, etc.
- b. Electronic Department: several oscillographs; an impulse generator; an installation for the production of monocrystals; an installation for the purification of germanium and silicon; a double monochromator, etc.
- c. Electro-Optical Department: One 2-beam oscillograph; three single-beam oscillographs; a Q24 quartz spectrograph installation from ~~Zeiss~~, Jena, not yet mounted because of shortage of space; a double monochromator with three sets of prisms made of glass, quartz and salt; a spectrograph with glass and quartz optics; a Zernicke galvanometer; five multiflex galvanometers; a number of measurement installations.
- d. Chemical Department: A Neubauer spectrograph with glass optics; a microscope; a number of analytical scales; a polarization microscope; thermostats, etc.

5. The Institute's precision machinery workshop is ~~located by Minister Barthold Genger~~, with eight ~~machines~~ ^{machines}. In addition, there is master electrician ~~Gerhard Schulz~~, with one assistant.

- 1. ☐ Comment: ~~Richard Seifert is now head of the Institute for Organic Chemistry at Humboldt University, Berlin.~~ 25X
- 2. ☐ Comment: Richard Seifert & Co., Roentgenwerk, Hamburg 13, Hermann-Behn-Weg 5-11. 25X

SECRET CONTROL/U.S. OFFICIALS ONLY

2. *Wart. Sec. Richard Seifert & Co., Roentgenwerk, Hamburg 13, Hermann-Behn-Weg 5-11.*

Page Denied

CLASSIFICATION ~~SECRET~~

CENTRAL INTELLIGENCE AGENCY

REPORT

INFORMATION REPORT

COUNTRY East Germany

DATE DISTR. 19 November 1954

SUBJECT Academy Institute for Research on the
Physics of Solids, [REDACTED]

NO. OF PAGES

PLACE
ACQUIRED

NO. OF ENCLS
(LISTED BELOW)

DATE OF INFO.

SUPPLEMENT TO
REPORT NO

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794 OF THE U. S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS DOCUMENT IS PROHIBITED BY LAW.

THIS IS UNEVALUATED INFORMATION

25X1

1. The Academy Institute for Research on the Physics of Solids (Institut fuer Festkoerperforschung) is located at Lindenberger Weg 70-73 in Berlin-Buch in the fifth floor of a building which also houses the Academy Institute for Medicine and Biology. In late August 1954 there was a shortage of space for the work of the Institut fuer Festkoerperforschung; long-standing plans to transfer it to a building near the Berliner Gendarmenmarkt were expected to be carried out soon. Necessary funds have been approved.
2. The Institute is headed by Professor Friedrich Moeglich, who at the same time holds the chair for Theoretical Physics at the Berlin Humboldt University. Moeglich is a Communist sympathizer; it is not known, however, whether he is a member of the SED. His deputy in the Institute is Dr. Hellmut Simon.
3. The Institute is divided into the following Departments:
 - a. Department for Structural Research (Strukturforschung) headed by Dr. Hellmut Simon. The following are Simon's scientific colleagues:
 - (1) Dipl. Phys. Gerhard Eichhoff
 - (2) Dipl. Phys. Hans Thiel
 - (3) Dipl. Phys. Eduard Schnuerer
 - (4) Diplomat. Kessler (fou)
 - (5) Diplomat. Walter Schweinberger

In addition, the following permanent personnel belong to this department: precision mechanic, Maassen (fnu); laboratory worker, Miss Kippoldt (fnu); laboratory worker, Schepstadt (fnu); laboratory worker, Mrs. Ewerenz (fnu). As of late August 1954, the scientific staff had in the recent past been engaged as follows:

- (a) Simon: X-ray dosimetry with cadmium sulfide cells as indicators and the study of the qualities of CdS crystals under X-ray radiation.
- (b) Eichhoff was building a spectrograph for ultra-soft X-rays; it was almost completed.

25X1

CLASSIFICATION SECRET

STATE	ARMY	SRB	DISTRIBUTION						
ARMY	SRB								

Page Denied

SECRET

-2-

- (c) Thiel had been engaged in the measuring of X-ray fields with CdS dosimeters. At that time, he was building an installation for the study of infrared elimination (Infrarottilgung) with CdS crystals subjected to X-ray radiation.
- (d) Schnuerer: X-ray absorption measurements with CdS crystals. He was also engaged in the construction of an X-ray monochromator.
- (e) Kessler had built a small Van de Graff installation of a few hundred kV.
- (f) Schweinberger was engaged in structural research on CdS crystals.

b. The Electronic Department, headed by Dr. Friedrich Eckart. He is assisted by the following scientific personnel:

- (1) Dipl. Phys. Gerhard Schubert
- (2) Dipl. Phys. Heinz Dietrich
- (3) Dipl. Phys. Gerhard Mueller

In addition, the department has the following technical personnel: laboratory worker, Miss von Halden (fnu); circuit mechanic, Albrecht (fnu); precision mechanic, Buerstner (fnu). As of late August 1954, the scientific staff of the Department had, in the recent past, been engaged as follows:

- (a) Eckart: Measurement of the conductivity of purest selenium and measurement of its Hall effect. In addition to his work in the Institute, Eckart also works with the Radio and Television Center in Berlin-Adlershof.
- (b) Schubert: Study of CdS subjected to bombardment with electrons of slow and medium speed.
- (c) Dietrich: Preparation of purest selenium. Construction of an installation for growing monocrystals. Research on germanium and silicon diodes and transistors. Dietrich has cooperated with VEB Werk fuer Nachrichten-elemente "Carl von Ossietzky" (Dralowid) in Teltow for the development of transistors.
- (d) Mueller: Study of phosphorus subjected to impulse radiation with electrons.

c. Electro-Optical Department, headed by Dr. Wilhelm Muscheid until 30 June 1954, now temporarily headed by Dr. Wilhelm Buttler. The following are its scientific personnel:

- (1) Miss Dr. Ingrid Poppe
- (2) Dipl. Phys. Brauer (fnu)
- (3) Dipl. Chem. Gdo Holland-Mell

In addition, the Department has the following technical personnel: laboratory worker and mechanic, Bernau (fnu); laboratory worker, Judeck (fnu); laboratory worker, Richard Peschke; laboratory worker, Mrs. Zosher (fnu); laboratory worker, Mrs. Pillich (fnu); laboratory worker, Pfeiffer (fnu). The Photographic Laboratory of the Institute, headed by Mrs. Rieske (fnu), who is assisted by Mrs. Gauger (fnu), is attached to this department. The scientific staff of the department had been engaged as follows:

-2-

SECRET

SECRET

-3-

- (a) Muscheid and Buttler: Contact studies of CdS cells; measurement of the Hall effect, conductivity and noise of CdS cells.
- (b) Poppe: Measurement of the potential of CdS cells and measurement of the fluorescence of CdS crystals. Also the study of layers to be steamed upon CdS crystals.
- (c) Brauer: Study of the rise and decay of the photo-current in CdS cells. Also the measurement of the rise and decay of luminescence in CdS cells.
- (d) Holland-Nell: Production of CdS crystals with defined impurities. In the future he was also to try to produce mercury sulfide monocrystals. In addition, he had been assigned the study of III-V compounds.

d. Chemical Department, headed by Professor Otto Neunhoeffer until January 1954. The department, as of late August 1954, did not have a head. It was planned to call Dr. Pretz (fmu), an industrial chemist, as its head. The personnel of the department are:

- (1) Dr. Schlueter (fmu)
- (2) Dr. Ebert (fmu)

In addition, there are the following: laboratory worker, Mueller (fmu); laboratory worker, Matskeit (fmu); laboratory worker, Sauvageout (fmu). The personnel of the department were engaged as follows:

- (a) Schlueter: Pycnometric measurements with silver bromide monocrystals for the purpose of comparing pycnometric density with X-ray density.
- (b) Ebert: Production of CdS crystals through sublimation of CdS powder, at high temperatures around 1,600 Centigrade. Also the preparation of purest germanium through thermal dissociation of GeH_4 .

4. The following equipment is available in the departments of the Institute:

- a. Department for Structural Research: The spectrograph for ultrasoft X-rays, built by Eichhoff; a double monochromator; an X-ray structure installation from the Seifert firm in Hamburg; several oscillographs, multiflex galvanometers, etc.
 - b. Electronic Department: several oscillographs; an impulse generator; an installation for the production of monocrystals; an installation for the purification of germanium and silicon; a double monochromator, etc.
 - c. Electro-Optical Department: One 2-beam oscillograph; three single-beam oscillographs; a Q24 quartz spectrograph installation from Zeiss, Jena, not yet mounted because of shortage of space; a double monochromator with three sets of prisms made of glass, quartz and salt; a spectrograph with glass and quartz optics; a Zernicke galvanometer; five multiflex galvanometers; a number of measurement installations.
 - d. Chemical Department: A Neubauer spectrograph with glass optics; a microscope; a number of analytical scales; a polarisation microscope; thermostats, etc.
5. The Institute's precision machinery workshop is headed by Meister Berthold Gauger, with eight mechanics under him. In addition, there is master electrician Gerhard Schulz, with one assistant.

1. Comment: Neunhoeffer is now head of the Institute for Organic Chemistry at Humboldt University, Berlin.

25X1

2. Comment: Richard Seifert & Co., Roentgenwerk, Hamburg 13, Hermann-Behn-Weg 5-11.

25X1

SECRET

Page Denied